AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Original) A guide wire comprising:

a wire member including a welded portion formed by welding a first wire disposed on the distal side of said wire member to a second wire disposed on the proximal side from said first wire and made from a material having an elastic modulus larger than that of said first wire, said welded portion being made substantially smooth; and

a cover layer provided on the outer periphery of said wire member covering at least said welded portion between said first wire and said second wire.

2. (Original) A guide wire comprising:

a wire member including a welded portion formed by welding a first wire disposed on the distal side of said wire member to a second wire disposed on the proximal side from said first wire and made from a material having an elastic modulus larger than that of said first wire; and

a cover layer provided on the outer periphery of said wire member covering at least said welded portion between said first wire and said second wire;

wherein said welded portion has a projection projecting in the outer peripheral direction.

3. (Original) A guide wire comprising:

a wire member including a welded portion formed by welding a first wire disposed on the distal side of said wire member to a second wire disposed on the proximal side from said first wire and made from a material having an elastic modulus larger than that of said first wire; and

a cover layer provided on the outer periphery of said wire member covering at least said welded portion between said first wire and said second wire; and

a distal-side cover layer disposed on the distal side from said cover layer, said distal-side cover layer being made from a material different from that of said cover layer.

4. (Original) A guide wire according to claim 3, wherein said cover layer is formed in such a manner that said wire member is substantially not heated at the time of covering said wire member with said cover layer, and said distal-side cover layer is formed in such a manner that said wire member is heated at the time of covering said wire member with said distal-side cover layer.

5. (Original) A guide wire comprising:

a wire member including a welded portion formed by welding a first wire disposed on the distal side of said wire member to a second wire disposed on the proximal side from said first wire and made from a material having an elastic modulus larger than that of said first wire; and

a cover layer provided on the outer periphery of said wire member covering at least said welded portion between said first wire and said second wire; and

a proximal-side cover layer disposed on the proximal side from said cover layer, said proximal-side cover layer being made from a material different from that of said cover layer.

6. (Original) A guide wire according to claim 5, wherein said cover layer is formed in such a manner that said wire member is substantially not heated at the time of covering said wire member with said cover layer, and said proximal-side cover layer is formed in such a manner that said wire member is heated at the time of covering said wire member with said proximal-side cover layer.

7. (New) A guide wire according to claim 1, wherein the cover layer is made from a material that reduces friction of the cover layer.

8. (New) A guide wire according to claim 1, wherein the cover layer is made from a fluorocarbon resin or hydrophilic material.

9. (New) A guide wire according to claim 1, wherein the cover layer is made from a silicone resin and functions as a reinforcing layer for reinforcing the welded portion.

10. (New) A guide wire according to claim 1, where the cover layer is made from a metal having an elastic modulus that is equal to or smaller than that of the first wire.

11. (New) A guide wire according to claim 1, wherein the thickness of the cover layer is within the range of 1 to 2 μm and is approximately uniform throughout the cover layer.

12. (New) A guide wire according to claim 1, wherein the thickness of the cover layer covering the welded portion is approximately uniform.

13. (New) A guide wire according to claim 1, wherein the cover layer extends across the welded portion and has a thickness that is approximately uniform from a proximal end of the welded portion to a distal end of the welded portion.

14. (New) A guide wire according to claim 1, wherein the first wire is made from a superelastic alloy and the second wire is made from stainless steel.

15. (New) A guide wire according to claim 1, wherein the second wire is made from a Co-based alloy and the Co-based alloy is a Co--Ni--Cr alloy.

16. (New) A guide wire according to claim 1, wherein a connection end face of the first wire and a connection end face of the second wire at which the first and second wires are welded are each substantially perpendicular to an axial direction of the first and second wires, and the welding between the first and second connection end faces is performed by a butt resistance welding process.

17. (New) A guide wire according to claim 3, wherein the cover layer is made from a material that reduces friction of the cover layer.

18. (New) A guide wire according to claim 3, wherein the cover layer is made from a fluorocarbon resin or hydrophilic material.

19. (New) A guide wire according to claim 3, wherein the cover layer is made from a silicone resin and functions as a reinforcing layer for reinforcing the welded portion.

20. (New) A guide wire according to claim 3, where the cover layer is made from a metal having an elastic modulus that is equal to or smaller than that of the first wire.

21. (New) A guide wire according to claim 3, wherein the thickness of the cover layer is within the range of 1 to 2 μm and is approximately uniform throughout the cover layer.

22. (New) A guide wire according to claim 3, wherein the thickness of the cover layer covering the welded portion is approximately uniform.

23. (New) A guide wire according to claim 3, wherein the cover layer covers the welded portion and has a thickness that is approximately uniform from a proximal end of the welded portion to a distal end of the welded portion.

24. (New) A guide wire according to claim 3, wherein the first wire is made from a superelastic alloy and the second wire is made from stainless steel.

25. (New) A guide wire according to claim 3, wherein the second wire is made from a Co-based alloy and the Co-based alloy is a Co--Ni--Cr alloy.

26. (New) A guide wire according to claim 3, wherein a connection end face of the first wire and a connection end face of the second wire at which the first and second wires and welded are each substantially perpendicular to an axial direction of the first and second wires, and the welding between the first and second connection end faces is performed by a butt resistance welding process.

27. (New) A guide wire according to claim 3, wherein the distal-side cover layer is made from a material that reduces friction of the distal-side cover layer.

28. (New) A guide wire according to claim 3, wherein the distal-side cover layer is made from a fluorocarbon resin or hydrophilic material.

29. (New) A guide wire according to claim 3, wherein the average thickness of the distal-side cover layer is in the range of 1 to 20 μm.